Billet Description
for
SENIOR ENVIRONMENTAL ENGINEER
(CO-04)

MAJOR DUTIES

A. Meets with Federal, state, municipal, and tribal officials, and community residents relative to environmental monitoring, and the planning, design or design review, troubleshooting, construction, and administration associated with water, wastewater, solid waste and other pollution control facilities to serve Federal facilities, municipalities, and Indian homes and communities.

B. Conducts field environmental surveys and engineering investigations.

C. Drafts engineering reports, technical drawings, technical specifications, and project status reports. Prepares drafts of legal agreements. Prepares requisitions for materials and services. Prepares preliminary project design recommendations.

D. Represents the Contracting Officer in the administration, inspection, and approval of environmental monitoring or construction contracts.

E. Reviews/inspects engineering work and construction performed by contractors. Ensures that all work is performed in accordance with approved plans and specifications. Ensures as-built information is recorded accurately and measures quantities for payment. Assists senior program officials in conducting final inspections.

F. Develops and maintains files containing complete documentation of all project actions from initial development through project completion including financial records and final reports.

G. Arranges and conducts operation and maintenance training for operators and other project participants. Participates in fluoridation promotion and other aspects of environmental health engineering. Provides technical assistance to Federal agencies, states, tribes and communities in matters related to environmental health.

H. May supervise engineers, construction workers and inspectors, technicians, draftsmen, and clerical staff, and prioritizes their work. Assists supervisor with the coordination of construction activities.

I. EDUCATION AND EXPERIENCE

A. Education: B.S. Degree in Civil or Environmental engineering from and ABET accredited college or university.

B. Experience: A minimum of five years total of fundamental engineering experience in environmental monitoring and/or surveying, design or design review, preparation of plans and specifications, and

construction management and inspection is required. A working knowledge of, and experience in, environmental investigations and/or the design and construction of sanitation or other pollution control facilities is required; e.g., water wells, water storage tanks, water treatment and distribution systems, pumping equipment, sewage collection and treatment systems, and solid waste disposal operations. Knowledge of construction safety standards and practices also is required. An Engineer-In-Training (EIT) certificate from any state is required. A current PE (Professional Engineer license) from and state may substitute for two years of experience. For supervisory positions, a minimum of one year of experience (not in addition to five years of professional experience) as a supervisor (technical or non-technical employees) is required. Experience in office management is desired.

II. ACCOUNTABILITY

A. Positive Contributions to Organization's Mission: Performs a variety of environmental engineering tasks of average technical difficulty without the benefit of close guidance. Routinely assists the supervisor with providing consultation to engineering staff. Efforts are directed toward the environmental monitoring, design, design review, troubleshooting, construction, and operation of large and small water, sewerage and solid waste systems in urban and scattered, geographically remote locations. Managerial impact is limited to immediate work group.

B. Consequences of Judgmental Failure: Exercises independant judgment in accomplishing a variety of engineering tasks. Judgment affects productivity, work quality, and timeliness of service. Errors in judgment may result in the loss of substantial investments or efforts and funds and/or could affect the health status of one or more individuals (e.g. failure to enforce safety standards on construction jobsites)

III. SUPERVISORY RESPONSIBILITY:

A. Number Supervised: Supervises up to six technical/clerical employees and three professional employees engaged in engineering and construction related activities.

B. Impact of Direction Given: Directs construction, surveys, engineering studies and/or repair work; reviews and evaluates quality of work performance of field office staff, including engineers; exercises complete administrative control over subordinates, and carries out program policies.

IV. PERSONAL RESPONSIBILITY

A. Character of Direction Received: Assignments are received from the supervisor in terms of defining project locations, objectives, priorities, and deadlines. Independently plans and carries out successive steps; however, assistance with unusual monitoring, construction, operation, and/or maintenance problems is available. Supervisor conducts periodic on-site inspections to assess project

problems encountered are discussed with supervisor before any action is taken. Completed work is evaluated for technical soundness, appropriateness and conformity to engineering standards and program requirements.

B. Guidelines and Originality: Follows established written guidelines and procedures (environmental monitoring and facility design standards, standard specifications, programmatic requirements and regulations). Often, while overseeing engineering activities in the field, makes independent judgments regarding minor modifications to an element of design or specified work procedure. Uses independent judgment in interpreting and adapting guidelines. However, determinations regarding need for major modification or deviation from established procedure are referred to the supervisor or Contracting Officer.

V. PERSONAL WORK CONTACTS

A. Persons Contacted: Principal contacts are with supervisor, other public health professionals, Area/Regional contracting, finance, personnel management staffs, the public, officials of Federal agencies, states, tribes and communities, and with contractors/contractor representatives engaged in supervised construction activities. Senior managers of other Federal, State, and/or municipal agencies are contacted periodically.

B. Work Contact Purpose: The purpose of most contacts is to coordinate project efforts to interpret technical provisions, and/or to resolve engineering problems. The individuals contacted are usually working toward mutual goals and have basically cooperative attitudes.

CONTINUING EDUCATION:

A. Professional Licensure: It is highly recommended that the officer take the PE (Professional Engineer) examination when eligible.

B. Training: It is highly recommended that formal training/course work be taken in Construction Contracting/Management and Mid-Level Supervision/Management.